

Texas eyes desalination as option to increase state's water supply

With the state's ongoing drought and rapidly growing population, planning for the state's long-term water needs has become a top policy priority for Texas. Among the approaches called for in the most recent state water plan is more reliance on desalination technologies to produce potable water from brackish and marine sources.

Lawmakers are considering how to address barriers to large-scale implementation of desalination. Anticipated obstacles include the costs of desalinating water and transporting it across the state and a regulatory system that some say is not designed for the comparatively new technology.

While desalination is not a new idea in Texas, several developments in recent years may spur more interest and investment in the technology. One is a new dedicated funding system to support the long-term implementation of state water plan projects. Another is an increased focus on the desalination of brackish groundwater, which is cheaper and less energy intensive than seawater desalination and creates fewer concerns about the transfer of water over great distances.

Desalination is one approach among many proposed by the state's water plan for expanding Texans' access to water, especially in times of drought.

Planning and financing

The primary message of the state water plan, according to the Texas Water Development Board (TWDB), is that in serious drought conditions, the state does not have enough water to meet the needs of its population, including individuals, businesses, and agricultural enterprises (see *Current drought*,

[page 2](#)). The plan contains policy recommendations to the Legislature and estimates of economic damage that could result if the state's water needs are not met. It also includes the estimated cost of desalination and other water management strategies recommended by the regional planning groups, as well as estimates of how much state financial help would be needed to implement them.

Implementing all strategies, including 562 water supply projects, is expected to yield 9 million acre-feet of water by 2060. An acre-foot

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States consider changes to laws on marijuana possession and use

The 84th Texas Legislature may join a growing number of states revising laws on possession and use of marijuana. Recent revisions and proposed changes to marijuana laws in other states fall into three main categories: lowering criminal penalties for possession of small amounts, legalizing use for medical purposes, and legalizing recreational use.

The most high-profile state policy has been approval of the sale of recreational marijuana in Colorado and Washington state starting in 2014. Voters in Alaska and Oregon are scheduled to vote this November on initiatives to do the same. These laws generally tax and regulate marijuana in a manner similar to alcohol. Voters in Washington, D.C. also will decide on an initiative legalizing the possession of up to 2 ounces of marijuana.

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(325,851 gallons) typically is enough to satisfy the water needs of three Texas families for a year. Under the water plan, about 34 percent of this water would come from conservation and reuse, about 17 percent from new major reservoirs, about 34 percent from other surface water supplies, and the remaining 15 percent from various other sources, including desalination. The TWDB estimates the capital cost to complete all recommended projects between now and 2060 to be about \$53 billion.

In 2013, the 83rd Legislature enacted HB 4 by Ritter to ensure long-term funding for the state water plan through two new funds, the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT). Voters in 2013 approved a constitutional amendment authorizing the transfer of \$2 billion from the Economic Stabilization Fund (“rainy day fund”) to capitalize the two new funds. This allows the TWDB to provide low-cost financial assistance to local and regional water providers for projects identified in the 2012 state water plan. This money is available through a revolving loan program to subsidize low-interest loans and to enable longer repayment terms, deferral of payments, and incremental repurchase terms for projects in which the state owns an interest.

Water projects that do not qualify for SWIFT or SWIRFT funding still might be eligible to receive financial assistance from other TWDB programs, including the water infrastructure fund and the state participation program. According to the TWDB, municipal water providers are expected to need nearly \$27 billion in state financial help in the next 30 years, including for implementing desalination plants and other emerging technologies.

Desalination in Texas

The 2012 state water plan envisions Texas deriving 3.4 percent of its water supply from seawater and brackish water desalination by 2060 (see *Brackish water vs. seawater*, p. 3). According to projections from regional water planning groups that contribute information to the state water plan, desalinated brackish groundwater could add about 181,568 acre-feet of new

Current drought

The current drought is considered to be among the worst in Texas history. In 2011, all 254 of the state’s counties were experiencing drought. Even with recent rains and cold winter temperatures, large sections of Texas continue to experience exceptional or extreme drought, including much of the Hill Country, West Texas, and the Panhandle. According to the Texas Commission on Environmental Quality (TCEQ), 50 of the state’s public water systems were at risk of running out of water within 180 days as of September 26, 2014. Severe declines in aquifer and reservoir levels have compromised water supplies and delivery to several public water systems.

In a series of disaster proclamations issued between July 5, 2011, and January 16, 2014, Gov. Rick Perry declared that drought conditions posed an imminent threat to the economy, public health, and property of Texas and its citizens. Forecasts by the state climatologist for continued drought and the state’s rapidly growing population have made the search for abundant, cost-effective water sources a top state priority.

water each year by 2060, accounting for 2 percent of all recommended water management strategies. The estimated cost of implementing the recommended desalination strategies is \$1.8 billion for seawater desalination and \$1.1 billion for brackish groundwater desalination, for a total cost of \$2.9 billion.

How does desalination work? Desalination is the process of removing salt from seawater or brackish water, according to the TWDB. The two principal methods rely on thermal or membrane-based technology. Thermal desalination works by heating the saline water, which causes the water molecules to separate from the salt particles through evaporation. The desalinated steam cools and condenses in a separate reservoir, from which it can be delivered to consumers. Membrane-based desalination, which is more common, uses reverse osmosis to remove salt particles from water by forcing the saline water through a membrane under pressure.

Both methods, in addition to producing potable water, yield a salty waste product that traditionally requires disposal. Many inland desalination projects inject this by-product into underground wells. Those closer to the coast often deposit the salty waste into the sea. Both methods present environmental concerns, either through the possibility of fresh water contamination or the effect that salty waste might have on marine ecosystems.

Improvements in technology have increased the yield of potable water and reduced the waste from desalination. Until recently, El Paso's Kay Bailey Hutchison Desalination Plant recovered about 83 percent of the water it treated, storing the briny waste product in three deep injection wells powered by solar energy. A private company, Enviro Water Minerals Co., further processes the concentrated brine, rather than disposing of it, in order to extract additional fresh water while creating marketable commodities, such as high-purity salt and fertilizer. Through this extra step, the utility is able to convert about 99 percent of the brackish water it treats into potable water.

Brackish water and desalination. Texas has an estimated 2.7 billion acre-feet of brackish water underground that could be treated to drinking water standards or made suitable for other purposes through desalination, according to the TWDB. The cost and energy required to treat brackish groundwater is influenced by many of the same factors that affect the cost of seawater desalination, including the size and location of the plant, available brine disposal methods, and electricity prices. Brackish water is generally less expensive to treat because of its lower salt content. In addition, consumers of treated brackish groundwater tend to be closer to the desalination facility, which reduces water transportation costs. The cost of drilling a well to reach the brackish reservoirs, which often lie deeper than fresh water resources, is also a factor in the cost of exploiting brackish groundwater.

The Brackish Resources Aquifers Characterization System (BRACS) is a program through which the TWDB systematically maps and assesses the brackish portions of the state's major and minor aquifers to estimate the amount of brackish groundwater in Texas,

Brackish water vs. seawater

Most of the source water targeted for desalination in Texas falls into two categories: brackish water and seawater. The Texas Water Development Board (TWDB) defines "brackish water" as water containing total dissolved solids (TDS) — which can include minerals, salts and metals — ranging from 1,000 milligrams to 10,000 milligrams per liter.

Most of the state's brackish water lies underground, although pockets of surface water in Texas meet TWDB's definition. Water suitable for desalination that contains TDS greater than 10,000 milligrams per liter may include saline surface water and groundwater, as well as saline water found in estuaries and bays. Seawater typically has a TDS content of about 35,000 milligrams per liter.

Nearly 100 municipal, commercial, and privately owned brackish water desalination facilities across Texas combined are producing 138 million gallons of desalinated water per day, according to the Texas Desalination Association. The TWDB has indicated that 46 of those desalination plants are built for municipal purposes, which are designed to produce collectively about 123 million gallons per day, plus another combined 500,000 gallons per day from 50 smaller units. Of the 46 municipal facilities, 12 use surface water and 34 use groundwater. Ten more municipal facilities, including a planned facility in San Antonio, have been approved for construction by TCEQ.

where it is located, and how it can be pumped safely without impacting fresh groundwater. The study of the Pecos Valley Aquifer project was completed in August 2011. BRACS is currently mapping the following three projects:

- Queen City and Sparta aquifers in McMullen and Atascosa counties;
- Gulf Coast Aquifer in the Lower Rio Grande Valley; and
- Carrizo-Wilcox Aquifer in South Central Texas.

The dark areas on the map below show the distribution of brackish groundwater in Texas aquifers and other geological formations.

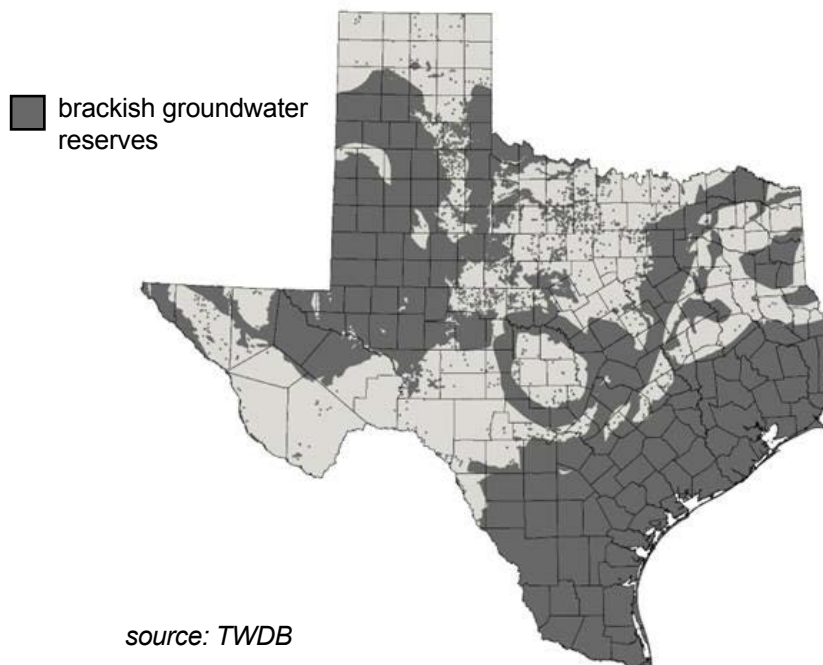
Seawater resources and desalination. With a 367-mile coastline along the Gulf of Mexico, Texas has access to a vast supply of seawater for desalination. The largest barrier to widespread adoption of seawater desalination is cost, which is double that of treating brackish groundwater. Because seawater is saltier than brackish groundwater, it requires more energy to treat to drinking water standards. The expense of transferring treated water from the coast to consumers throughout the state also adds to the cost of seawater desalination.

As a result, according to the TWDB, the volume of drinking water produced through brackish groundwater desalination is expected to increase by 83 percent between 2010 and 2030, while the volume produced from seawater is expected to increase by only 14 percent in the same period.

According to the TWDB, three regional water planning groups with direct access to the Gulf of Mexico have recommended seawater desalination as a water management strategy in their plans. The City of Corpus Christi considered seawater desalination as an alternative for its water supply portfolio, which, if implemented, would produce an estimated 28,000 acre-feet per year of desalinated water by 2060. Statewide, seawater desalination is projected to produce nearly 126,000 acre-feet of new water in 2060 — about 1.5 percent of the volume from all strategies recommended by the regional water planning groups.

No seawater desalination plants are currently operating in Texas, although a plastics company, M&G Polymers USA, is in the permitting process with TCEQ to build and operate a seawater desalination project near the Corpus Christi Bay.

Distribution of brackish groundwater in Texas



Since 2002, TWDB has funded two seawater desalination plant pilot studies at a total cost of about \$3.13 million – one with the Brownsville Public Utility Board and one with the Laguna Madre Water District, which serves South Padre Island, Port Isabel and the surrounding area. In recent legislative sessions, TWDB has requested but not received from the Legislature grant funding to subsidize the construction and financing of each plant. The Brownsville utility reports that it is unable to continue the project without grant funding to support construction. Voters in the Laguna Madre district in 2011 authorized a bond issuance that could be used to fund a seawater desalination plant capable of treating 1 million gallons of water per day. According to the water district, it has not set a date to build the facility and may instead elect to use the bond issuance for an indirect potable reuse project.

Addressing potential obstacles

The growing pressure to develop new water supplies combined with the abundance of brackish groundwater in Texas has water planners looking to desalination for new sources of potable water that also could free the existing fresh water supply for stream flow and other uses. The potential of desalination, however, remains constrained by its cost and energy use and the need to transport treated water across the state. Some observers say changes to the state's regulatory and permitting process are needed to facilitate the growth of desalination.

Cost and energy. In general, the technology required to exploit new sources of water makes developing new sources more expensive than using existing water supplies. As a result, the largest barrier to widespread adoption of desalination is cost, including capital cost, debt service, and operating cost.

While recent innovations, including improvements in thermal and membrane-based technologies, have made desalination more cost competitive, it still uses a great deal of energy. El Paso's \$91 million Kay Bailey Hutchison brackish water desalination plant in Fort Bliss can produce up to 27.5 million gallons of fresh water daily using reverse osmosis. Because of the plant's energy consumption, its cost to produce drinking water from brackish groundwater is about twice that

of treating ordinary groundwater. As a result, the plant rarely runs at full capacity, producing 11 acre-feet (3.5 million gallons) per day on average at a cost of \$489 per acre-foot. In 2012, the plant supplied about 4 percent of El Paso's water. The cost passed to ratepayers is about \$3.35 per month, according to the El Paso Water Utility, which estimates that the cost of importing water would be still higher than producing fresh water through desalination.

The cost to process brackish water is about half that of processing seawater. According to the TWDB, seawater desalination costs about \$3.60 to \$5.80 per 1,000 gallons of potable water produced, not including the cost of transporting potable water to consumers. The cost of desalinated brackish groundwater can range from \$1.25 to \$2.60 per 1,000 gallons produced, not including the cost of transport. In some cases, desalinated water can be blended with other sources to produce a more economical end product.

To reduce infrastructure costs and maximize water resources, some water producers are investigating the co-location of desalination facilities with power plants and renewable energy supplies. For example, the San Antonio Water System is working with San Antonio's municipal energy utility, CPS Energy, to implement a co-location project that would provide water and energy to San Antonio. The plan would pair a brackish water desalination facility with a natural gas peaking power plant, which is designed to ramp up quickly and produce energy during peak demand. The power plant, when not otherwise needed, would provide energy for desalination, while the desalination plant would provide water for cooling at the power plant.

A bill considered during the regular session of the 83rd Legislature, HB 2752 by Larson and Callegari, would have encouraged the integration of brackish desalination projects with electric generation facilities. The bill was left pending after a hearing in the House Natural Resources Committee.

Operating a desalination facility can be a risky proposal for water utilities due to the expense of borrowing to invest in the technology and the cost of the water produced. The retail cost of desalinated water lowers demand among consumers, which also may reduce water sales revenue and the utility's ability to

pay off its bond debt. In Australia, for example, the operations of four large-scale desalination facilities have been suspended due to the availability of cheaper water supplies, despite the commitment of billions of dollars in construction and pipeline costs that must be paid by taxpayers.

Transport costs. One factor in the expense of desalination is the cost of transporting water from where it is produced to where it is needed. Distributing desalinated seawater from the Gulf Coast to other parts of the state would require the use of pipelines over long distances, adding to the cost of water that is already more expensive to produce than water from traditional sources. Brackish groundwater is more abundant than seawater in many parts of Texas and generally places the water source closer to the end user.

A bill considered during the regular session of the 83rd Legislature, HB 2334 by Callegari, included proposals to facilitate the transfer within the state of potable water obtained through desalination. The bill would have required TCEQ to issue without a hearing a “bed and banks” permit to use any flowing natural stream in the state to convey treated marine seawater or treated brackish groundwater. It would have exempted water diverted from the Gulf of Mexico from certain rules on transferring water between basins.

Supporters of the bill said it would encourage desalination as a long-term water solution for Texas by streamlining the process while still allowing for appropriate oversight by groundwater districts and TCEQ. Opponents said it would short-circuit review and scrutiny of proposed desalination projects necessary to ensure they produce clean and dependable water while not harming the environment. HB 2334 was approved by the House Natural Resources Committee but not considered by the full House.

Regulatory issues. TCEQ is charged with issuing the primary requisite environmental permits for desalination plants in the state. Because desalination in Texas is still in its infancy, current TCEQ rules and regulations do not apply specifically to this technology. As a result, obtaining the necessary permits to operate a desalination facility can include requirements that add time and cost and do not necessarily apply to other water projects.

For example, all public water systems, including water treatment plants that desalinate brackish groundwater, must have their water treatment plant plans approved by TCEQ. Because the agency does not have approved minimum design, operating, monitoring, and reporting criteria for desalination processes, such as reverse osmosis membrane technology, a producer seeking to develop such a facility must provide site-specific studies to TCEQ before submitting the plans.

TCEQ has responded to concerns that its regulatory process can hamper the development of desalination and other innovative technologies by reviewing and amending some of its rules. It now allows the use of computer modeling as an alternative to pilot studies, so site-specific studies and plan review processes for the approval of reverse osmosis membrane-based groundwater desalination systems can be performed concurrently. TCEQ says it has been working with producers to further expedite the process on a case-by-case basis when appropriate.

Some supporters of expanding desalination say TCEQ’s permitting process does not take into account the difference between desalination facilities and other water projects. Developing large-scale desalination initiatives can span decades, yet the permits for such projects must be renewed every five years. To ensure the projects can be effectively financed, producers favor lengthening state permits for brackish water desalination to 30 years.

One provision of HB 2578 by Larson, which was considered by the 83rd Legislature in 2013, would have required TCEQ to adopt rules requiring local groundwater districts to issue permits with a minimum term of 30 years for projects in brackish groundwater production zones designed to pump and treat brackish groundwater to drinking water standards. HB 2578 died in the Senate Natural Resources Committee.

Groundwater districts. About 90 percent of the state’s groundwater resources lie within the jurisdiction of a groundwater conservation district. These districts adopt rules and issue permits for the production and transportation of groundwater in accordance with state law, which does not distinguish between fresh and brackish groundwater. With the recent emergence of brackish groundwater as a potentially valuable resource,

policymakers are examining whether the current permitting scheme should be revised to better regulate exploitation of both fresh and brackish groundwater.

In some areas, including the Gulf Coast region, brackish water flows in or near the underground layers that contain fresh water. Some fear this proximity could increase the risk of fresh water being tainted while brackish water is pumped. According to TWDB, the potential for contamination is not as great in other parts of Texas, including the Carrizo-Wilcox Aquifer, where fresh water layers are separated from pockets of brackish water by hundreds of feet of shale and clay.

Of the state's 99 groundwater conservation districts, at least seven have drafted separate rules for permitting brackish groundwater to incentivize its development as a resource while protecting nearby fresh water supplies. One is the Evergreen Underground Water Conservation District in South Texas, which sits atop part of the Carrizo-Wilcox Aquifer. Evergreen's rules for developing brackish groundwater allow it temporarily or permanently to suspend pumping if testing indicates a change in fresh water quality in the aquifer from activities within the production zone.

Facing the uncertainty posed by these rules, SAWS elected to pump brackish groundwater from southern Bexar County, which has no groundwater conservation district. However, the supply of brackish groundwater in Bexar County is not sufficient for the utility to produce as much drinking water through desalination as originally planned, prompting it to make up the difference by seeking fresh groundwater sources from other parts of the state.

Some observers say groundwater districts should issue separate permits for fresh and brackish groundwater. Brackish groundwater is plentiful and relatively few are currently interested in exploiting it. These observers say a brackish groundwater production permit could incentivize development by allowing producers to drill wells closer together and to extract more water than is allowed under permits for extraction of fresh groundwater. A separate brackish groundwater permit also could specify requirements for constructing wells and monitoring water quality to help ensure the protection of fresh water resources, they say.

Others say establishing two sets of requirements could result in a confusing permitting scheme that might unnecessarily complicate the state's groundwater planning and management process. Only a few groundwater districts have reserves of brackish and fresh groundwater that are hydrologically disconnected enough to allow the pumping of brackish groundwater without adversely affecting the quality and availability of fresh groundwater. For this reason, they say, it would be more appropriate for these affected districts to modify their general rules as necessary than to overhaul the entire permitting scheme.

— by **Blaire D. Parker**

Marijuana, continued from page 1

Three states in 2014 approved the use of marijuana for medical purposes, bringing the total to 23 states and the District of Columbia. Florida voters will decide in November whether to amend their state constitution to do the same. Medical marijuana laws usually address who can obtain medical marijuana and under what circumstances.

Texas and other states have debated whether to lower criminal penalties for possession of small amounts of marijuana. Sixteen states and the District of Columbia considered such bills in 2014, according to the Marijuana Policy Project, a group seeking to end prohibitions on marijuana. Debate often centers on whether to reduce low-level marijuana possession to a fine-only offense. It is fueled by questions about how to punish low-level drug offenses appropriately, the cost to local and state governments of current policies, and how the level of punishment for possession affects drug abuse.

This report outlines recent proposals on state laws governing possession and use of marijuana, focusing on proposals to reduce criminal penalties, and describes how state marijuana laws interact with federal law.

State vs. federal drug laws

Possession and distribution of marijuana remains illegal under federal law, even though some states have legalized medical and recreational marijuana and reduced criminal offenses for low-level possession. Federal prosecutions for drug offenses generally do not focus on individuals possessing small amounts of marijuana on private property, leaving these cases to state and local law enforcement officials.

The U.S. Department of Justice (DOJ) has issued guidelines for federal law enforcement authorities to follow in states that have legalized medical marijuana or the possession of small amounts of marijuana for recreational adult use. Under the guidelines, federal resources should not be used to interfere with state laws as long as the states follow certain regulatory and enforcement standards.

Guidelines for enforcement of federal laws.

An August 2013 DOJ memo lists federal priorities for enforcement of marijuana laws, including preventing distribution to minors and preventing criminal entities, gangs, and cartels from receiving revenue from marijuana sales. The memo says DOJ expects states and local governments to implement strong and effective regulatory enforcement systems. According to DOJ, it informed the governors of Washington and Colorado that it was deferring a challenge to their marijuana legalization laws based on assurances that they would have strict regulations. The memo says that marijuana remains illegal under the federal Controlled Substances Act and that enforcement guidelines do not change federal authority to enforce the law.

In February 2014, the U.S. Treasury Department and DOJ issued policies stating that federal prosecutions for certain financial crimes that involved marijuana should be subject to the same enforcement priorities outlined in the August 2013 DOJ memo.

A 2009 DOJ memo on medical marijuana said federal resources should not be focused on those complying with existing state laws on the medical use of marijuana but should prioritize commercial enterprises that unlawfully market and sell marijuana for profit.

Classification as Schedule 1 drug. The federal government is currently reviewing the classification of marijuana as a Schedule 1 drug, the class of drugs considered the most dangerous. Schedule 1 drugs include heroin, LSD, and other drugs considered to have no currently accepted medical use and a high potential for abuse. The current classification places marijuana in a category considered more dangerous than cocaine, methamphetamine, and oxycodone, all of which are in Schedule 2. Any change in marijuana's classification would require multiple layers of review involving several federal entities. Federal authorities have not said when the current review would be completed.

Texas criminal penalties

Under the Texas Health and Safety Code, it is a crime to sell or possess marijuana or synthetic marijuana. Sec. 481.121 makes it a crime to knowingly

or intentionally possess a usable quantity, and the offense is punished according to the amount possessed. Offenses are:

- class B misdemeanors (up to 180 days in jail and/or a maximum fine of \$2,000) if the amount possessed was 2 ounces or less;
- class A misdemeanors (up to one year in jail and/or a maximum fine of \$4,000) if the amount was 4 ounces or less but more than two ounces;
- state-jail felonies (180 days to two years in a state jail and an optional fine of up to \$10,000) if the amount was 5 pounds or less but more than 4 ounces;
- third-degree felonies (two to 10 years in prison and an optional fine of up to \$10,000) if the amount was 50 pounds or less but more than 5 pounds;
- second-degree felonies (two to 20 years in prison and an optional fine of up to \$10,000) if the amount was 2,000 pounds or less but more than 50 pounds; and
- life in prison or a term of five to 99 years and a fine of up to \$50,000 if the amount possessed was more than 2,000 pounds.

In 2013, there were 70,276 arrests in Texas for marijuana possession, about 57 percent of all drug possession arrests.

Repeat misdemeanor offenses. Under Texas' repeat offenders law, most second and subsequent class A and class B misdemeanors, including marijuana possession, are subject to minimum jail terms but are not enhanced to more serious misdemeanors or felonies, and the maximum jail term is the same as for first offenses. This means that repeat offenses for possession of 4 ounces or less of marijuana remain misdemeanors. If a jail term is imposed, it must be for a minimum of 90 days for repeat class A misdemeanors and 30 days for repeat class B misdemeanors.

Cite and summons law. A peace officer has discretion to handle certain cases of class A and class B misdemeanor marijuana possession by issuing a citation and a summons to appear in court rather than arresting a suspect and taking the suspect to jail. Using the cite and summons procedure in Code of Criminal Procedure, sec. 14.06 instead of making an arrest does not change the penalties that can be assessed in a case.

The House County Affairs Committee is studying the cite and summons law this interim. It is examining which counties have implemented the law, whether it has relieved overcrowding in county jails, and if individuals receiving citations comply. At a May 2014 hearing, witnesses said six jurisdictions in Texas currently use cite and summons.

Proposals to lower criminal penalties

The Texas Legislature has considered proposals to lower criminal penalties for possessing small amounts of marijuana and is expected to discuss the issue again in the 2015 legislative session. The 83rd Legislature's House Criminal Jurisprudence Committee in 2013 approved a bill to reduce penalties for marijuana possession, but it died in the Calendars Committee. HB 184 by Dutton, as approved by the committee, would have lowered the punishment for possession of 1 ounce or less of marijuana in certain cases. It would have required courts to punish a class B marijuana possession case as class C misdemeanor if the crime were a first marijuana possession offense and if the offender was younger than 21 years old and agreed to complete a drug abuse program.

Many proposals to lower criminal penalties for marijuana possession in Texas are similar to the bill considered by the Legislature in 2013 and would reduce punishment for possession of a small amount of the drug to a class C misdemeanor, making the potential penalty a fine of up to \$500 with no jail time. The debate on these proposals centers on the appropriate level of criminalization for marijuana possession, the cost of enforcing current law, and whether lower penalties would encourage drug use.

Supporters of making low-level marijuana possession a fine-only crime say:

Penalties for possessing small amounts of marijuana should be reduced to better reflect the seriousness of marijuana possession in relation to other crimes and to allow state and local governments to use their criminal justice resources more efficiently and effectively. This can be done without encouraging drug use.

Level of criminalization. Current laws, which punish possession of small amounts of marijuana with jail time, over-criminalize a non-violent behavior that does not pose a serious health or public safety risk. Class B and class A misdemeanor penalties are too severe, given that possession of more dangerous drugs carries the same punishment and marijuana can be less harmful than legal substances such as alcohol and prescription drugs.

Over-criminalization can result in negative consequences that are out of proportion to the offense for those charged and their families. Drug charges or convictions can result in job loss and reduced access to housing and education. Because of racial disparities in marijuana possession arrests, these effects can disproportionately affect people of color.

Reducing the penalty for possessing small amounts of marijuana to a class C misdemeanor would make the consequences better fit the offense while keeping possession illegal. It still would be illegal to traffic drugs, to drive while under the influence of marijuana, and for youths to possess marijuana.

Costs. State and local government costs to enforce current laws on possession are too high, given that the offense poses little risk to public safety. Costs include time and resources spent arresting, prosecuting, and locking up those charged and in many cases providing

Medical marijuana

Marijuana use to treat medical conditions has been legalized by 23 states and the District of Columbia, according to a recent report by the National Conference of State Legislators (NCSL). Another 11 allow limited access or a legal defense for medical use of certain marijuana products, according to NCSL. In November, Florida voters will decide whether to amend that state's constitution to legalize medical marijuana.

States that allow medical marijuana generally remove criminal penalties for possession for certain medical reasons and regulate how marijuana can be prescribed and grown. Medical marijuana may be legalized for specific or general diagnoses or conditions, including cancer, multiple sclerosis, severe pain, severe nausea, and seizures. States may establish policies on how medical marijuana can be obtained, the forms that can be used, and how eligible patients are tracked. Many states have a system of dispensaries, and most track patients through a registry or identity cards.

In 2013, HB 594 by Naishtat would have created an affirmative defense to prosecution for possessing marijuana if a doctor recommended it to address symptoms or effects of a medical condition. Under the proposed bill, law enforcement agencies would have been prohibited from starting an administrative, civil, or criminal investigation into a physician solely on the grounds that the doctor discussed medical marijuana with a patient or made a statement that its potential benefits would likely outweigh health risks. HB 594 was heard by the Public Health Committee and left pending.

Details on each state's medical marijuana laws, including when the policy was enacted, whether the state has a patient registry or identity cards, whether it allows dispensaries, and whether it allows sales to patients from other states, are available at the NCSL's [website](#).

lawyers for them at taxpayer expense. Many arrested for possession stay in jail before trial or a plea agreement, and some spend additional time in jail serving sentences, at an estimated statewide daily average cost of \$61 per person, according to one report from the Texas Commission on Jail Standards in 2014.

Making possession of small amounts of marijuana a class C misdemeanor would reduce costs by allowing police officers to issue tickets instead of making arrests. Criminal justice resources would be freed to address dangerous or violent criminals that threaten public safety. More resources also could be funneled into drug treatment and education, which can be more effective at reducing recidivism than jail time.

The cite and summons procedure in current law and other policies, such as using bonds to move arrestees out of jail, do not go far enough to reduce costs. These procedures are not used consistently statewide and affect only initial procedures, not the penalties that can be assessed after a conviction.

Drug use. Reducing penalties for marijuana possession would not encourage drug use. Society's message opposing drugs would remain intact because possession would remain illegal. Those who fail to pay fines assessed for a class C misdemeanor conviction could be arrested and jailed. More severe punishments would remain for possession of larger amounts of marijuana and selling marijuana to children. Probationers and parolees caught with marijuana could be in violation of their terms of release and sent to prison.

Lowering criminal penalties could help address the problem of drug abuse. Texas could funnel savings from the criminal justice system into more education, treatment, and prevention, which are more effective than criminal sanctions. With reduced criminal sentences, more might seek help for drug addiction. The "gateway" drug theory — that marijuana leads individuals to use harder drugs — is not supported by evidence.

Texans support reduced penalties for possessing small amounts of marijuana, according to polls taken in 2014 and 2013. Thirty-two percent of those surveyed

in a 2014 University of Texas/Texas Tribune poll supported legalizing the possession of small amounts of marijuana, and 17 percent supported legalizing possession of any quantity. Sixty-one percent of those surveyed by Public Policy Polling in September 2013 supported changing the penalty for possessing up to an ounce of marijuana from a criminal to a civil offense, punishable only by a fine of up to \$100.

Opponents of making low-level marijuana possession a fine-only crime say:

Reducing criminal penalties for low-level marijuana possession to a class C misdemeanor, fine-only offense would eliminate important criminal sanctions available under current law, would be inappropriate solely to address concerns about costs, and could lead to increased drug use.

Level of criminalization. Marijuana is a potentially harmful drug, and possessing even small amounts should continue to be treated like other illegal drug possession and carry possible jail time. Current law making possession of up to 2 ounces a class B misdemeanor and up to 4 ounces a class A misdemeanor makes available a range of appropriate punishments.

Jail time could be a fitting penalty in some low-level possession cases. Class B misdemeanor possession applies to up to 2 ounces of marijuana, which is a large amount, given that some estimate that 1 ounce of marijuana could make 60 joints. In some cases, jail sentences could motivate addicts to enter treatment or to stop abusing drugs.

Current law provides options for cases in which jail time may not be appropriate. Those charged with possession can be routed into pre-trial diversion programs to attend classes and perform community service and possibly have their cases dismissed. Deferred adjudication, a type of probation, also can be used to supervise those charged with low-level possession, with charges eventually being dismissed. In some cases, plea deals can result in no jail time.

Lowering penalties could result in increased marijuana use that could raise serious public safety issues. Related crimes, such as impaired driving, robbery, burglary, and drug dealing could increase.

Costs. Concerns about the costs of enforcing laws on marijuana possession should not override the need to handle these offenses appropriately within the current range of sanctions. Texans have signaled a willingness to pay for jail time when it is warranted, which it may be in some low-level marijuana possession cases. In other cases, a marijuana possession charge may arise from a more serious case, such as drug dealing or weapons possession, making the cost of enforcement an issue of public safety.

Law enforcement agencies have the discretion under current law to handle certain cases of low-level marijuana possession by issuing a citation and a summons to appear in court instead of with an arrest or to issue bonds so suspects do not have to spend time in jail. Expanding the use of these policies could contribute to cost savings.

Drug use. Lowering criminal penalties for marijuana possession would send the wrong message by de-stigmatizing marijuana use, which could lead to increased consumption of the drug. This could exacerbate public health problems, such as drug abuse and addiction. These problems can be especially harmful to youth who are developing cognitively and for whom marijuana could serve as a gateway to other drug use. Increased drug consumption could negatively affect job performance, school achievements, life choices, and more.

— by Kellie Dworaczyk

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